

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the Divisional Application:

1. (Original) A high frequency transducer, comprising:
a first diaphragm having a first coil thereon;
a second diaphragm having a second coil thereon formed on a periphery of said first diaphragm;
a first seat having a first magnet structure, said first seat defining an annular opening to allow said second coil to be moveably suspended therein; and
a second seat having a second magnet structure, said second seat and said second magnet defining an annular gap to allow said first coil to be moveably suspended therein.
2. (Original) The invention of Claim 1, wherein said first and second magnets are substantially disk shaped.
3. (Original) The invention of Claim 1, wherein said first and second magnets are substantially flat in structure.
4. (Original) The invention of Claim 2, wherein said first magnet and said second magnet can be magnetized after assembly.

5. (Original) The invention of Claim 2, wherein said first magnet and said second magnet can be magnetized simultaneously after assembly.

6. (Original) The invention of Claim 2, wherein said first magnet and said second magnet have similar polarity.

7. (Original) The invention of Claim 2, wherein said first and second magnets are neodymium iron boron magnets.

Claims 8-11 (Canceled).

12. (Original) The invention of Claim 2, wherein said annular gap contains a substance having high heat transfer capability.

13. (Original) The invention of Claim 12, wherein said substance is a metallic fluid and is injected into said annular gap.

14. (Original) The invention of Claim 13, wherein said metallic fluid is a ferrofluid and is injected into said annular gap.

Claims 15-20 (Canceled).

21. (New) The invention of Claim 1, wherein a magnetic flux path generated by the first magnet and by the second magnet, affects the flux density in both the annular gap and the annular opening.

22. (New) The invention of Claim 1, wherein the first seat including said first magnetic structure, and the second seat including said second magnetic structure, form an essentially non-separable, single magnetic assembly.